ng via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:SSPTASMR1614

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

| | | |
|---|---|---|
| NEWS 1 | | Web Page for STN Seminar Schedule - N. America |
| NEWS 2 | DEC 01 | ChemPort single article sales feature unavailable |
| NEWS 3 | JUN 01 | CAS REGISTRY Source of Registration (SR) searching enhanced on STN |
| NEWS 4 | JUN 26 | NUTRACEUT and PHARMAML no longer updated |
| NEWS 5 | JUN 29 | IMSCOPROFILE now reloaded monthly |
| NEWS 6 | JUN 29 | EPFULL adds Simultaneous Left and Right Truncation (SLART) to AB, MCLM, and TI fields |
| NEWS 7 | JUL 09 | PATDPAFULL adds Simultaneous Left and Right Truncation (SLART) to AB, CLM, MCLM, and TI fields |
| NEWS 8 | JUL 14 | USGENE enhances coverage of patent sequence location (PSL) data |
| NEWS 9 | JUL 27 | CA/CAplus enhanced with new citing references |
| NEWS 10 | JUL 16 | GBFULL adds patent backfile data to 1855 |
| NEWS 11 | JUL 21 | USGENE adds bibliographic and sequence information |
| NEWS 12 | JUL 28 | EPFULL adds first-page images and applicant-cited references |
| NEWS 13 | JUL 28 | INPADOCDB and INPAFAMDB add Russian legal status data |
| NEWS 14 | AUG 10 | Time limit for inactive STN sessions doubles to 40 minutes |
| NEWS 15 | AUG 18 | COMPENDEX indexing changed for the Corporate Source (CS) field |
| NEWS 16 | AUG 24 | ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced |
| NEWS 17 | AUG 24 | CA/CAplus enhanced with legal status information for U.S. patents |
| NEWS 18 | SEP 09 | 50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY |
| NEWS 19 | SEP 11 | WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus |

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

```
* * * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:25:31 ON 01 OCT 2009

=> file reg
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.22       0.22

FILE 'REGISTRY' ENTERED AT 11:25:55 ON 01 OCT 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   29 SEP 2009  HIGHEST RN 1186580-18-6
DICTIONARY FILE UPDATES:  29 SEP 2009  HIGHEST RN 1186580-18-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\STNEXP\Queries\10590445-2 str.str

L1      STRUCTURE UPLOADED

=> s l1 sss full
FULL SEARCH INITIATED 11:26:14 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      795 TO ITERATE

100.0% PROCESSED      795 ITERATIONS                              42 ANSWERS
SEARCH TIME: 00.00.01

L2           42 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                       185.88     186.10

FILE 'CAPLUS' ENTERED AT 11:26:23 ON 01 OCT 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
```

FILE COVERS 1907 - 1 Oct 2009 VOL 151 ISS 14
FILE LAST UPDATED: 30 Sep 2009 (20090930/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.



This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> s l2
L3 5 L2

=> d l2 1-5 ibib ab
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:end

=> d l3 1-5 ibib ab

L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:543704 CAPLUS
DOCUMENT NUMBER: 151:115902
TITLE: Development of a Second-Generation Antiandrogen for Treatment of Advanced Prostate Cancer
AUTHOR(S): Tran, Chris; Ouk, Samedy; Clegg, Nicola J.; Chen, Yu; Watson, Philip A.; Arora, Vivek; Wongvipat, John; Smith-Jones, Peter M.; Yoo, Dongwon; Kwon, Andrew; Wasielewska, Teresa; Welsbie, Derek; Chen, Charlie Degui; Higano, Celestia S.; Beer, Tomasz M.; Hung, David T.; Scher, Howard I.; Jung, Michael E.; Sawyers, Charles L.
CORPORATE SOURCE: Human Oncology and Pathogenesis Program, Memorial Sloan-Kettering Cancer Center, New York, NY, 10065, USA
SOURCE: Science (Washington, DC, United States) (2009), 324(5928), 787-790
CODEN: SCIEAS; ISSN: 0036-8075
PUBLISHER: American Association for the Advancement of Science
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Metastatic prostate cancer is treated with drugs that antagonize androgen action, but most patients progress to a more aggressive form of the disease called castration-resistant prostate cancer, driven by elevated

expression of the androgen receptor. Here we characterize the diarylthiohydantoins RD162 and MDV3100, two compds. optimized from a screen for nonsteroidal antiandrogens that retain activity in the setting of increased androgen receptor expression. Both compds. bind to the androgen receptor with greater relative affinity than the clin. used antiandrogen bicalutamide, reduce the efficiency of its nuclear translocation, and impair both DNA binding to androgen response elements and recruitment of coactivators. RD162 and MDV3100 are orally available and induce tumor regression in mouse models of castration-resistant human prostate cancer. Of the first 30 patients treated with MDV3100 in a Phase I/II clin. trial, 13 of 30 (43%) showed sustained declines (by >50%) in serum concns. of prostate-specific antigen, a biomarker of prostate cancer. These compds. thus appear to be promising candidates for treatment of advanced prostate cancer.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:524196 CAPLUS

DOCUMENT NUMBER: 150:472707

TITLE: Diarylhydantoin derivatives as androgen receptor inhibitors and their preparation, pharmaceutical compositions and use in the treatment of hormone refractory prostate cancer

INVENTOR(S): Jung, Michael E.; Yoo, Dongwon; Sawyers, Charles L.; Tran, Chris

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 58pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2009055053 | A2 | 20090430 | WO 2008-US12149 | 20081024 |
| WO 2009055053 | A3 | 20090611 | | |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |
| US 20090111864 | A1 | 20090430 | US 2008-257743 | 20081024 |
| PRIORITY APPLN. INFO.: | | | US 2007-996076P P | 20071026 |

OTHER SOURCE(S): MARPAT 150:472707

AB The invention relates to diarylhydantoin compds. of formula I and to methods for synthesizing them and using them in the treatment of hormone refractory prostate cancer. Compds. of formula I wherein R1 and R2 are independently (un)substituted C8 or fewer alkyl; R1R2 may take together with the carbon atom attached to form (un)substituted cycloalkyl; R3 is H, CN, formyl, acyl, 2-imidazolyl, 2-dihydroimidazolyl and

(methylamino)iminomethyl; R4 is H, F, Cl, Br and I; R11 and R12 are independently H and Me; are claimed. Example compound II was prepared by a multi-step procedure (procedure given). All the invention compds. were evaluated for their androgen receptor inhibitory activity.

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1242575 CAPLUS
DOCUMENT NUMBER: 147:502363
TITLE: Preparation of diarylthiohydantoins as androgen receptor antagonists for the treatment of hormone refractory prostate cancer
INVENTOR(S): Jung, Michael; Yoo, Dongwon; Sawyers, Charles L.; Tran, Chris
PATENT ASSIGNEE(S): Regents of the University of California, USA
SOURCE: U.S. Pat. Appl. Publ., 63pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 20070254933 | A1 | 20071101 | US 2007-730168 | 20070329 |
| US 20080139634 | A2 | 20080612 | | |
| AU 2007245022 | A1 | 20071108 | AU 2007-245022 | 20070329 |
| CA 2648139 | A1 | 20071108 | CA 2007-2648139 | 20070329 |
| WO 2007127010 | A2 | 20071108 | WO 2007-US7854 | 20070329 |
| WO 2007127010 | A9 | 20080522 | | |
| WO 2007127010 | A3 | 20080731 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| EP 2013187 | A2 | 20090114 | EP 2007-754380 | 20070329 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS | | | | |
| JP 2009531449 | T | 20090903 | JP 2009-503016 | 20070329 |
| MX 2008012492 | A | 20081212 | MX 2008-12492 | 20080929 |
| NO 2008004480 | A | 20081219 | NO 2008-4480 | 20081023 |
| KR 2009009215 | A | 20090122 | KR 2008-726364 | 20081028 |
| IN 2008DN09073 | A | 20090320 | IN 2008-DN9073 | 20081029 |
| CN 101460467 | A | 20090617 | CN 2007-80020099 | 20081201 |

PRIORITY APPLN. INFO.: US 2006-786837P P 20060329
WO 2007-US7854 W 20070329

OTHER SOURCE(S): MARPAT 147:502363

AB Title compds. I [wherein R1, R2 = Me; R1 and R2 together with the carbon to which they are linked form a 4/5-membered cycloalkyl; R3 = carbamoyl, alkylcarbamoyl, carbamoylalkyl, etc.; R4 = H or F] were prepared as androgen receptor antagonists. For instance, II was synthesized in 25% yield by cyclization of 4-isothiocyanato-2-trifluoromethylbenzonitrile (preparation given) with N-methyl-2-4-[(1,1-dimethylcyanomethyl)amino]benzamide (preparation

given). Extensive biol. tests of I and related compds. were carried out, and their relationship with structures was reported. The invented compds. and their pharmaceutical compns. are useful for the treatment of hormone refractory prostate cancer.

L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1228845 CAPLUS
DOCUMENT NUMBER: 145:505452
TITLE: Preparation of diarylhydantoin compounds as androgen receptor antagonists useful against hormone refractory prostate cancer
INVENTOR(S): Sawyers, Charles L.; Jung, Michael E.; Chen, Charlie D.; Ouk, Samedy; Welsbie, Derek; Tran, Chris; Wongvipat, John; Yoo, Dongwon
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: PCT Int. Appl., 166pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006124118 | A1 | 20061123 | WO 2006-US11417 | 20060329 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2006248109 | A1 | 20061123 | AU 2006-248109 | 20060329 |
| CA 2608436 | A1 | 20061123 | CA 2006-2608436 | 20060329 |
| EP 1893196 | A1 | 20080305 | EP 2006-748863 | 20060329 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | | |
| JP 2008540523 | T | 20081120 | JP 2008-511114 | 20060329 |
| US 20070004753 | A1 | 20070104 | US 2006-433829 | 20060515 |
| MX 2007014132 | A | 20080409 | MX 2007-14132 | 20071112 |
| NO 2007006401 | A | 20080208 | NO 2007-6401 | 20071212 |
| KR 2008014039 | A | 20080213 | KR 2007-729188 | 20071213 |
| IN 2007DN09668 | A | 20080620 | IN 2007-DN9668 | 20071213 |
| CN 101222922 | A | 20080716 | CN 2006-80025545 | 20080114 |

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| US 2005-680835P | P | 20050513 |
| US 2005-750351P | P | 20051215 |
| US 2006-756552P | P | 20060106 |
| US 2006-785978P | P | 20060327 |
| WO 2006-US11417 | W | 20060329 |

OTHER SOURCE(S): MARPAT 145:505452

AB The present invention relates to diarylhydantoin compds., including diarylthiohydantoins (shown as I; variables defined below; e.g. N-methyl-4-[7-(4-cyano-3-trifluoromethylphenyl)-8-oxo-6-thioxo-5,7-diazaspiro[3.4]octan-5-yl]-2-fluorobenzamide (shown as II)), and methods for synthesizing them and using them in the treatment of hormone

refractory prostate cancer. For I: X = trifluoromethyl and iodo; W = O and NR5; R5 = H, Me, and -C(:D)-E-G, (D is S or O and E is N or O and G is (un)substituted alkyl or aryl, or D is S or O and E-G together are C1-C4 lower alkyl); R1 and R2 together comprise eight or fewer C atoms and = (un)substituted alkyl including haloalkyl, and, together with the C to which they are linked, (un)substituted cycloalkyl; R3 = H, halogen, Me, C1-C4 alkoxy, formyl, haloacetoxy, trifluoromethyl, cyano, nitro, hydroxy, Ph, amino, methylcarbamoyl, methoxycarbonyl, acetamido, methanesulfonamino, methanesulfonyl, 4-methanesulfonyl-1-piperazinyl, piperazinyl, and C1-C6 alkyl or alkenyl (un)substituted with hydroxy, methoxycarbonyl, cyano, amino, amido, nitro, (un)substituted carbamoyl including methylcarbamoyl, dimethylcarbamoyl, and hydroxyethylcarbamoyl; R3 is not methylaminomethyl or dimethylaminomethyl; and R4 = H, halogen, alkyl, and haloalkyl. Methods of preparation are claimed and prepns. and/or characterization data for .apprx.60 examples of I are included. For example, II was prepared in 4 steps (91, 94, 89, 57 % yields, resp.) involving intermediates N-methyl-2-fluoro-4-nitrobenzamide, N-methyl-2-fluoro-4-aminobenzamide, and N-methyl-4-(1-cyanocyclobutylamino)-2-fluorobenzamide; the last step comprises cyclization of 4-isothiocyanato-2-trifluoromethylbenzonitrile (preparation given) with N-methyl-4-(1-cyanocyclobutylamino)-2-fluorobenzamide in DMF under microwave irradiation at 80° for 16 h followed by refluxing for 3 h after addition of MeOH and 2 N HCl.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:235075 CAPLUS

DOCUMENT NUMBER: 144:312085

TITLE: Preparation of imidazolidine derivatives as antiandrogens

INVENTOR(S): Tachibana, Kazutaka; Sato, Haruhiko; Ohta, Masateru; Nakamura, Mitsuaki; Shiraishi, Takuya; Yoshino, Hitoshi; Emura, Takashi; Honma, Akie; Onuma, Etsuro; Kawata, Hiromitsu; Taniguchi, Kenji

PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 206 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006028226 | A1 | 20060316 | WO 2005-JP16664 | 20050909 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2005280908 | A1 | 20060316 | AU 2005-280908 | 20050909 |

```
     CA 2579886           A1    20060316    CA 2005-2579886        20050909
     EP 1790640           A1    20070530    EP 2005-782020         20050909
        R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
     CN 101048381         A     20071003    CN 2005-80036972       20050909
     KR 2007106969        A     20071106    KR 2007-707876         20070406
PRIORITY APPLN. INFO.:                      JP 2004-262888      A  20040909
                                            WO 2005-JP16664     W  20050909

OTHER SOURCE(S):         MARPAT 144:312085
AB   The title compds. I [Q = Q1, etc.; A = H, halo, ORa, etc.; E = alkyl; m =
     integer from 0 to 3; R2, R3 = alkyl; X1, X2 = O, S; Y = (un)substituted
     arylene, divalent (un)substituted 5- or 6-membered monocyclic heterocyclic
     group or divalent 8 to 10 membered (un)substituted fused-ring heterocyclic
     group; Z = CO, CO2, SO2, etc.; R1 = H, OH, (un)substituted alkyl, etc.; Ra
     = H, (un)substituted alkyl, (un)substituted alkylcarbonyl, etc.] are
     prepared  Thus, 4-[3-(1-ethoxycarbonylpiperidin-4-yl)-4,4-dimethyl-5-oxo-2-
     thioxoimidazolidin-1-yl]-2-trifluoromethylbenzonitrile was prepared in a
     multistep process.  The androgen antagonist activities of compds. of this
     invention were demonstrated.
OS.CITING REF COUNT:     3     THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
                               (4 CITINGS)
REFERENCE COUNT:         24    THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> d l3 1-5 ibib ab hit str
'STR' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
```

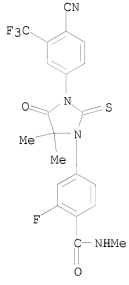
```
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):end

=> d l3 1-5 ibib ab hitstr

L3   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2009:543704  CAPLUS
DOCUMENT NUMBER:          151:115902
TITLE:                    Development of a Second-Generation Antiandrogen for
                          Treatment of Advanced Prostate Cancer
AUTHOR(S):                Tran, Chris; Ouk, Samedy; Clegg, Nicola J.; Chen, Yu;
                          Watson, Philip A.; Arora, Vivek; Wongvipat, John;
                          Smith-Jones, Peter M.; Yoo, Dongwon; Kwon, Andrew;
                          Wasielewska, Teresa; Welsbie, Derek; Chen, Charlie
                          Degui; Higano, Celestia S.; Beer, Tomasz M.; Hung,
                          David T.; Scher, Howard I.; Jung, Michael E.; Sawyers,
                          Charles L.
CORPORATE SOURCE:         Human Oncology and Pathogenesis Program, Memorial
                          Sloan-Kettering Cancer Center, New York, NY, 10065,
                          USA
SOURCE:                   Science (Washington, DC, United States) (2009),
                          324(5928), 787-790
                          CODEN: SCIEAS; ISSN: 0036-8075
PUBLISHER:                American Association for the Advancement of Science
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   Metastatic prostate cancer is treated with drugs that antagonize androgen
     action, but most patients progress to a more aggressive form of the
     disease called castration-resistant prostate cancer, driven by elevated
     expression of the androgen receptor.  Here we characterize the
     diarylthiohydantoins RD162 and MDV3100, two compds. optimized from a
     screen for nonsteroidal antiandrogens that retain activity in the setting
     of increased androgen receptor expression.  Both compds. bind to the
     androgen receptor with greater relative affinity than the clin. used
     antiandrogen bicalutamide, reduce the efficiency of its nuclear
```

translocation, and impair both DNA binding to androgen response elements and recruitment of coactivators. RD162 and MDV3100 are orally available and induce tumor regression in mouse models of castration-resistant human prostate cancer. Of the first 30 patients treated with MDV3100 in a Phase I/II clin. trial, 13 of 30 (43%) showed sustained declines (by >50%) in serum concns. of prostate-specific antigen, a biomarker of prostate cancer. These compds. thus appear to be promising candidates for treatment of advanced prostate cancer.

IT 915087-33-1, MDV 3100
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(development of second-generation antiandrogen for treatment of advanced prostate cancer)

RN 915087-33-1 CAPLUS

CN Benzamide, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-2-fluoro-N-methyl- (CA INDEX NAME)




OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:524196 CAPLUS

DOCUMENT NUMBER: 150:472707

TITLE: Diarylhydantoin derivatives as androgen receptor inhibitors and their preparation, pharmaceutical compositions and use in the treatment of hormone refractory prostate cancer

INVENTOR(S): Jung, Michael E.; Yoo, Dongwon; Sawyers, Charles L.; Tran, Chris

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 58pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2009055053 | A2 | 20090430 | WO 2008-US12149 | 20081024 |
| WO 2009055053 | A3 | 20090611 | | |

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

| | | | | |
|---|---|---|---|---|
| US 20090111864 | A1 | 20090430 | US 2008-257743 | 20081024 |

PRIORITY APPLN. INFO.: US 2007-996076P P 20071026

OTHER SOURCE(S): MARPAT 150:472707

AB The invention relates to diarylhydantoin compds. of formula I and to methods for synthesizing them and using them in the treatment of hormone refractory prostate cancer. Compds. of formula I wherein R1 and R2 are independently (un)substituted C8 or fewer alkyl; R1R2 may take together with the carbon atom attached to form (un)substituted cycloalkyl; R3 is H, CN, formyl, acyl, 2-imidazolyl, 2-dihydroimidazolyl and (methylamino)iminomethyl; R4 is H, F, Cl, Br and I; R11 and R12 are independently H and Me; are claimed. Example compound II was prepared by a multi-step procedure (procedure given). All the invention compds. were evaluated for their androgen receptor inhibitory activity.

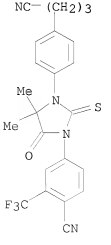
IT 1146974-94-8P 1146974-96-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

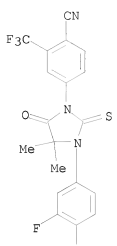
(drug candidate; preparation of diarylhydantoin derivs. as androgen receptor inhibitors useful in the treatment of hormone refractory prostate cancer)

RN 1146974-94-8 CAPLUS

CN Benzenebutanenitrile, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]- (CA INDEX NAME)



RN 1146974-96-0 CAPLUS
CN Benzenebutanenitrile, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-2-fluoro- (CA INDEX NAME)



L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1242575 CAPLUS
DOCUMENT NUMBER: 147:502363
TITLE: Preparation of diarylthiohydantoins as androgen receptor antagonists for the treatment of hormone refractory prostate cancer
INVENTOR(S): Jung, Michael; Yoo, Dongwon; Sawyers, Charles L.; Tran, Chris
PATENT ASSIGNEE(S): Regents of the University of California, USA
SOURCE: U.S. Pat. Appl. Publ., 63pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 20070254933 | A1 | 20071101 | US 2007-730168 | 20070329 |
| US 20080139634 | A2 | 20080612 | | |
| AU 2007245022 | A1 | 20071108 | AU 2007-245022 | 20070329 |
| CA 2648139 | A1 | 20071108 | CA 2007-2648139 | 20070329 |
| WO 2007127010 | A2 | 20071108 | WO 2007-US7854 | 20070329 |
| WO 2007127010 | A9 | 20080522 | | |
| WO 2007127010 | A3 | 20080731 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,

GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

EP 2013187 A2 20090114 EP 2007-754380 20070329
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS

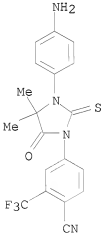
JP 2009531449 T 20090903 JP 2009-503016 20070329
MX 2008012492 A 20081212 MX 2008-12492 20080929
NO 2008004480 A 20081219 NO 2008-4480 20081023
KR 2009009215 A 20090122 KR 2008-726364 20081028
IN 2008DN09073 A 20090320 IN 2008-DN9073 20081029
CN 101460467 A 20090617 CN 2007-80020099 20081201
PRIORITY APPLN. INFO.: US 2006-786837P P 20060329
WO 2007-US7854 W 20070329

OTHER SOURCE(S): MARPAT 147:502363

AB Title compds. I [wherein R1, R2 = Me; R1 and R2 together with the carbon to which they are linked form a 4/5-membered cycloalkyl; R3 = carbamoyl, alkylcarbamoyl, carbamoylalkyl, etc.; R4 = H or F] were prepared as androgen receptor antagonists. For instance, II was synthesized in 25% yield by cyclization of 4-isothiocyanato-2-trifluoromethylbenzonitrile (preparation given) with N-methyl-2-4-[(1,1-dimethylcyanomethyl)amino]benzamide (preparation given). Extensive biol. tests of I and related compds. were carried out, and their relationship with structures was reported. The invented compds. and their pharmaceutical compns. are useful for the treatment of hormone refractory prostate cancer.

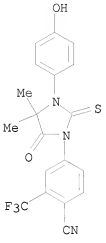
IT 915086-29-2P 915086-32-7P 915086-33-8P
915086-35-0P 915086-36-1P 915086-63-4P
915086-66-7P 915087-13-7P 915087-14-8P
915087-15-9P 915087-16-0P 915087-33-1P
915087-52-4P 915087-59-1P 915087-60-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of diarylthiohydantoins as androgen receptor antagonists for treatment of hormone refractory prostate cancer)

RN 915086-29-2 CAPLUS
CN Benzonitrile, 4-[3-(4-aminophenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)

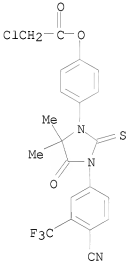



RN 915086-32-7 CAPLUS
CN Benzonitrile, 4-[3-(4-hydroxyphenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-

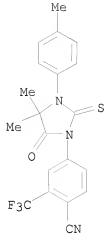
imidazolidinyl]-2-(trifluoromethyl)-  (CA INDEX NAME)



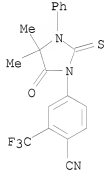

RN  915086-33-8  CAPLUS
CN  Acetic acid, 2-chloro-, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl ester  (CA INDEX NAME)



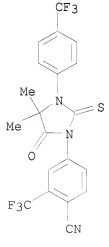

RN  915086-35-0  CAPLUS
CN  Benzonitrile, 4-[4,4-dimethyl-3-(4-methylphenyl)-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)-  (CA INDEX NAME)



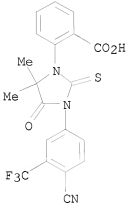

RN 915086-36-1 CAPLUS
CN Benzonitrile, 4-(4,4-dimethyl-5-oxo-3-phenyl-2-thioxo-1-imidazolidinyl)-2-(trifluoromethyl)- (CA INDEX NAME)



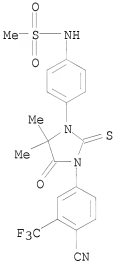

RN 915086-63-4 CAPLUS
CN Benzonitrile, 4-[4,4-dimethyl-5-oxo-2-thioxo-3-[4-(trifluoromethyl)phenyl]-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



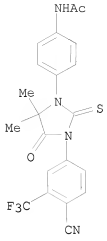
RN 915086-66-7 CAPLUS
CN Benzoic acid, 2-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]- (CA INDEX NAME)



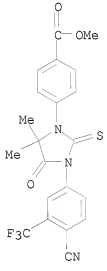
RN 915087-13-7 CAPLUS
CN Methanesulfonamide, N-[4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]- (CA INDEX NAME)



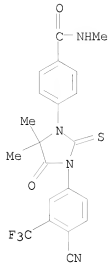
RN 915087-14-8 CAPLUS
CN Acetamide, N-[4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]- (CA INDEX NAME)



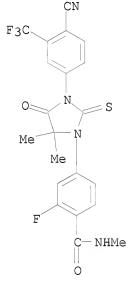

RN 915087-15-9 CAPLUS
CN Benzoic acid, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-, methyl ester (CA INDEX NAME)



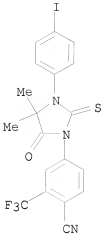

RN 915087-16-0 CAPLUS
CN Benzamide, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-N-methyl- (CA INDEX NAME)



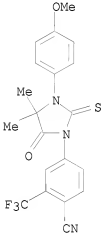
RN 915087-33-1 CAPLUS
CN Benzamide, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-2-fluoro-N-methyl- (CA INDEX NAME)



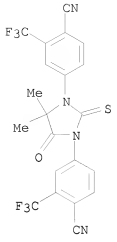
RN 915087-52-4 CAPLUS
CN Benzonitrile, 4-[3-(4-iodophenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



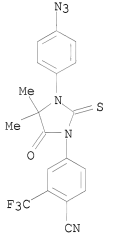

RN 915087-59-1 CAPLUS
CN Benzonitrile, 4-[3-(4-methoxyphenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)




RN 915087-60-4 CAPLUS
CN Benzonitrile, 4,4'-(4,4-dimethyl-5-oxo-2-thioxo-1,3-imidazolidinediyl)bis[2-(trifluoromethyl)- (CA INDEX NAME)



IT 915086-30-5
RL: PAC (Pharmacological activity); BIOL (Biological study)
(reference; preparation of diarylthiohydantoins as androgen receptor antagonists
for treatment of hormone refractory prostate cancer)
RN 915086-30-5 CAPLUS
CN Benzonitrile, 4-[3-(4-azidophenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1228845 CAPLUS
DOCUMENT NUMBER: 145:505452
TITLE: Preparation of diarylhydantoin compounds as androgen receptor antagonists useful against hormone refractory prostate cancer
INVENTOR(S): Sawyers, Charles L.; Jung, Michael E.; Chen, Charlie D.; Ouk, Samedy; Welsbie, Derek; Tran, Chris; Wongvipat, John; Yoo, Dongwon
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: PCT Int. Appl., 166pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006124118 | A1 | 20061123 | WO 2006-US11417 | 20060329 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2006248109 | A1 | 20061123 | AU 2006-248109 | 20060329 |
| CA 2608436 | A1 | 20061123 | CA 2006-2608436 | 20060329 |
| EP 1893196 | A1 | 20080305 | EP 2006-748863 | 20060329 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | | |
| JP 2008540523 | T | 20081120 | JP 2008-511114 | 20060329 |
| US 20070004753 | A1 | 20070104 | US 2006-433829 | 20060515 |
| MX 2007014132 | A | 20080409 | MX 2007-14132 | 20071112 |
| NO 2007006401 | A | 20080208 | NO 2007-6401 | 20071212 |
| KR 2008014039 | A | 20080213 | KR 2007-729188 | 20071213 |
| IN 2007DN09668 | A | 20080620 | IN 2007-DN9668 | 20071213 |
| CN 101222922 | A | 20080716 | CN 2006-80025545 | 20080114 |

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| US 2005-680835P | P | 20050513 |
| US 2005-750351P | P | 20051215 |
| US 2006-756552P | P | 20060106 |
| US 2006-785978P | P | 20060327 |
| WO 2006-US11417 | W | 20060329 |

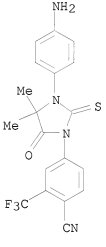
OTHER SOURCE(S): MARPAT 145:505452

AB The present invention relates to diarylhydantoin compds., including diarylthiohydantoins (shown as I; variables defined below; e.g. N-methyl-4-[7-(4-cyano-3-trifluoromethylphenyl)-8-oxo-6-thioxo-5,7-diazaspiro[3.4]octan-5-yl]-2-fluorobenzamide (shown as II)), and methods for synthesizing them and using them in the treatment of hormone refractory prostate cancer. For I: X = trifluoromethyl and iodo; W = O and NR5; R5 = H, Me, and -C(:D)-E-G, (D is S or O and E is N or O and G is (un)substituted alkyl or aryl, or D is S or O and E-G together are C1-C4 lower alkyl); R1 and R2 together comprise eight or fewer C atoms and = (un)substituted alkyl including haloalkyl, and, together with the C to which they are linked, (un)substituted cycloalkyl; R3 = H, halogen, Me, C1-C4 alkoxy, formyl, haloacetoxy, trifluoromethyl, cyano, nitro, hydroxy, Ph, amino, methylcarbamoyl, methoxycarbonyl, acetamido, methanesulfonamino, methanesulfonyl, 4-methanesulfonyl-1-piperazinyl, piperazinyl, and C1-C6 alkyl or alkenyl (un)substituted with hydroxy, methoxycarbonyl, cyano, amino, amido, nitro, (un)substituted carbamoyl including methylcarbamoyl, dimethylcarbamoyl, and hydroxyethylcarbamoyl; R3 is not methylaminomethyl or dimethylaminomethyl; and R4 = H, halogen, alkyl, and haloalkyl. Methods of preparation are claimed and prepns. and/or characterization data for .apprx.60 examples of I are included. For example, II was prepared in 4 steps (91, 94, 89, 57 % yields, resp.) involving intermediates N-methyl-2-fluoro-4-nitrobenzamide,

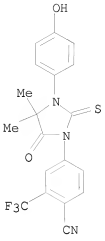
N-methyl-2-fluoro-4-aminobenzamide, and
N-methyl-4-(1-cyanocyclobutylamino)-2-fluorobenzamide; the last step comprises cyclization of 4-isothiocyanato-2-trifluoromethylbenzonitrile (preparation given) with N-methyl-4-(1-cyanocyclobutylamino)-2-fluorobenzamide in DMF under microwave irradiation at 80° for 16 h followed by refluxing for 3 h after addition of MeOH and 2 N HCl.

IT 915086-29-2P, 4-[3-(4-Aminophenyl)-4,4-dimethyl-5-oxo-2-thioxoimidazolidin-1-yl]-2-trifluoromethylbenzonitrile
915086-32-7P, 4-[3-(4-Hydroxyphenyl)-4,4-dimethyl-5-oxo-2-thioxoimidazolidin-1-yl]-2-trifluoromethylbenzonitrile
915087-15-9P, 4-[3-(4-Cyano-3-trifluoromethylphenyl)-5,5-dimethyl-4-oxo-2-thioxoimidazolidin-1-yl]benzoic acid methyl ester
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of diarylhydantoin compds. as androgen receptor antagonists useful against hormone refractory prostate cancer)

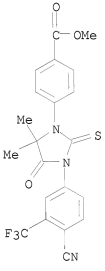
RN 915086-29-2 CAPLUS
CN Benzonitrile, 4-[3-(4-aminophenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)




RN 915086-32-7 CAPLUS
CN Benzonitrile, 4-[3-(4-hydroxyphenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



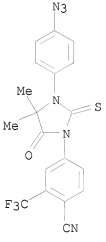

RN 915087-15-9 CAPLUS
CN Benzoic acid, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-, methyl ester (CA INDEX NAME)



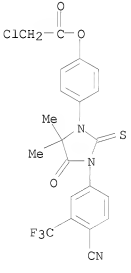

IT 915086-30-5P, 4-[3-(4-Azidophenyl)-4,4-dimethyl-5-oxo-2-thioxoimidazolidin-1-yl]-2-trifluoromethylbenzonitrile
915086-33-8P, Chloroacetic acid 4-[3-(4-cyano-3-trifluoromethylphenyl)-5,5-dimethyl-4-oxo-2-thioxoimidazolidin-1-yl]phenyl ester 915086-35-0P, 4-[3-(4-Methylphenyl)-4,4-dimethyl-5-oxo-2-thioxoimidazolidin-1-yl]-2-trifluoromethylbenzonitrile 915086-36-1P, 4-(3-Phenyl-4,4-dimethyl-5-oxo-2-thioxoimidazolidin-1-yl)-2-trifluoromethylbenzonitrile 915086-63-4P, 4-[4,4-Dimethyl-5-oxo-2-thioxo-3-(4-trifluoromethylphenyl)imidazolidin-1-yl]-2-trifluoromethylbenzonitrile 915086-66-7P, 2-[3-(4-Cyano-3-trifluoromethylphenyl)-5,5-dimethyl-4-oxo-2-thioxoimidazolidin-1-yl]benzoic acid 915087-13-7P, N-[4-[3-(4-Cyano-3-trifluoromethylphenyl)-5,5-dimethyl-4-oxo-2-thioxoimidazolidin-1-yl]phenyl]methanesulfonamide 915087-14-8P, N-[4-[3-(4-Cyano-3-trifluoromethylphenyl)-5,5-dimethyl-4-oxo-2-thioxoimidazolidin-1-yl]phenyl]acetamide 915087-16-0P,

4-[3-(4-Cyano-3-trifluoromethylphenyl)-5,5-dimethyl-4-oxo-2-thioxoimidazolidin-1-yl]-N-methylbenzamide 915087-33-1P 915087-52-4P 915087-59-1P 915087-60-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of diarylhydantoin compds. as androgen receptor antagonists useful against hormone refractory prostate cancer)

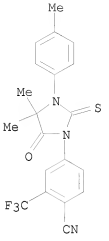
RN 915086-30-5 CAPLUS
CN Benzonitrile, 4-[3-(4-azidophenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



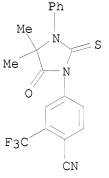
RN 915086-33-8 CAPLUS
CN Acetic acid, 2-chloro-, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl ester (CA INDEX NAME)



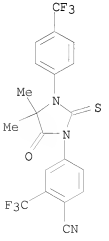
RN 915086-35-0 CAPLUS
CN Benzonitrile, 4-[4,4-dimethyl-3-(4-methylphenyl)-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



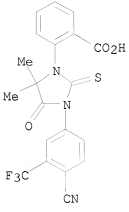

RN 915086-36-1 CAPLUS
CN Benzonitrile, 4-(4,4-dimethyl-5-oxo-3-phenyl-2-thioxo-1-imidazolidinyl)-2-(trifluoromethyl)- (CA INDEX NAME)



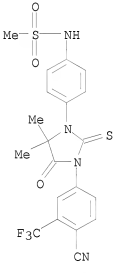

RN 915086-63-4 CAPLUS
CN Benzonitrile, 4-[4,4-dimethyl-5-oxo-2-thioxo-3-[4-(trifluoromethyl)phenyl]-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



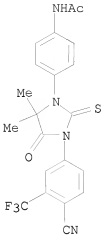
RN 915086-66-7 CAPLUS
CN Benzoic acid, 2-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]- (CA INDEX NAME)



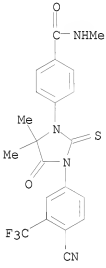
RN 915087-13-7 CAPLUS
CN Methanesulfonamide, N-[4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]- (CA INDEX NAME)



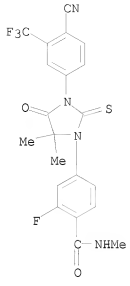
RN 915087-14-8 CAPLUS
CN Acetamide, N-[4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]- (CA INDEX NAME)



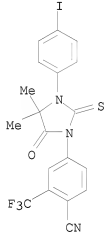

RN 915087-16-0 CAPLUS
CN Benzamide, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-N-methyl- (CA INDEX NAME)



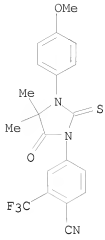

RN 915087-33-1 CAPLUS
CN Benzamide, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-2-fluoro-N-methyl- (CA INDEX NAME)



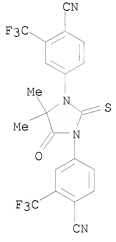
RN 915087-52-4 CAPLUS
CN Benzonitrile, 4-[3-(4-iodophenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



RN 915087-59-1 CAPLUS
CN Benzonitrile, 4-[3-(4-methoxyphenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)




RN 915087-60-4 CAPLUS
CN Benzonitrile, 4,4'-(4,4-dimethyl-5-oxo-2-thioxo-1,3-imidazolidinediyl)bis[2-(trifluoromethyl)- (CA INDEX NAME)




OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:235075 CAPLUS
DOCUMENT NUMBER: 144:312085
TITLE: Preparation of imidazolidine derivatives as antiandrogens
INVENTOR(S): Tachibana, Kazutaka; Sato, Haruhiko; Ohta, Masateru; Nakamura, Mitsuaki; Shiraishi, Takuya; Yoshino, Hitoshi; Emura, Takashi; Honma, Akie; Onuma, Etsuro; Kawata, Hiromitsu; Taniguchi, Kenji
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 206 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006028226 | A1 | 20060316 | WO 2005-JP16664 | 20050909 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2005280908 | A1 | 20060316 | AU 2005-280908 | 20050909 |
| CA 2579886 | A1 | 20060316 | CA 2005-2579886 | 20050909 |
| EP 1790640 | A1 | 20070530 | EP 2005-782020 | 20050909 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| CN 101048381 | A | 20071003 | CN 2005-80036972 | 20050909 |
| KR 2007106969 | A | 20071106 | KR 2007-707876 | 20070406 |

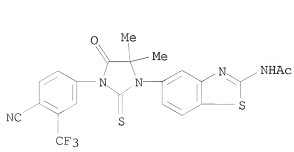
PRIORITY APPLN. INFO.: JP 2004-262888 A 20040909
WO 2005-JP16664 W 20050909

OTHER SOURCE(S): MARPAT 144:312085

AB The title compds. I [Q = Q1, etc.; A = H, halo, ORa, etc.; E = alkyl; m = integer from 0 to 3; R2, R3 = alkyl; X1, X2 = O, S; Y = (un)substituted arylene, divalent (un)substituted 5- or 6-membered monocyclic heterocyclic group or divalent 8 to 10 membered (un)substituted fused-ring heterocyclic group; Z = CO, CO2, SO2, etc.; R1 = H, OH, (un)substituted alkyl, etc.; Ra = H, (un)substituted alkyl, (un)substituted alkylcarbonyl, etc.] are prepared Thus, 4-[3-(1-ethoxycarbonylpiperidin-4-yl)-4,4-dimethyl-5-oxo-2-thioxoimidazolidin-1-yl]-2-trifluoromethylbenzonitrile was prepared in a multistep process. The androgen antagonist activities of compds. of this invention were demonstrated.

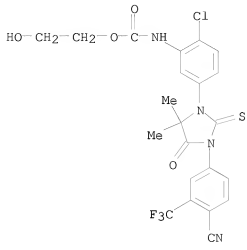
IT 879613-27-1P 879613-81-7P 879614-33-2P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of imidazolidine derivs. as antiandrogens)

RN 879613-27-1 CAPLUS
CN Acetamide, N-[5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-2-benzothiazolyl]- (CA INDEX NAME)

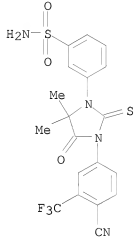



RN 879613-81-7 CAPLUS
CN Carbamic acid, [2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-

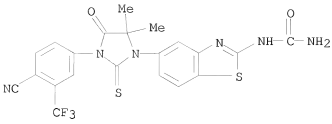
dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]-, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)



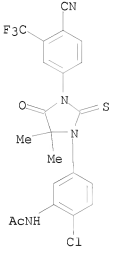
RN 879614-33-2 CAPLUS
CN Benzenesulfonamide, 3-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]- (CA INDEX NAME)



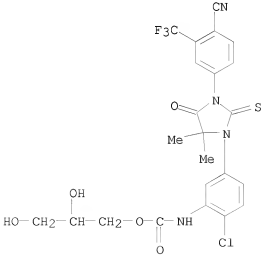
IT 879613-32-8P 879613-38-4P 879613-87-3P
879613-93-1P 879613-96-4P 879613-97-5P
879614-17-2P 879614-35-4P 879614-42-3P
879614-43-4P 879614-58-1P 879614-60-5P
879614-63-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of imidazolidine derivs. as antiandrogens)
RN 879613-32-8 CAPLUS
CN Urea, N-[5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-2-benzothiazolyl]- (CA INDEX NAME)



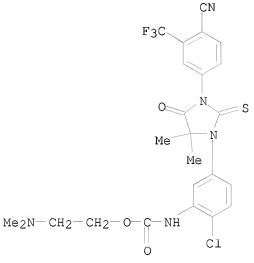
RN 879613-38-4 CAPLUS
CN Acetamide, N-[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]- (CA INDEX NAME)



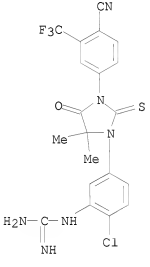
RN 879613-87-3 CAPLUS
CN Carbamic acid, [2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]-, 2,3-dihydroxypropyl ester (9CI) (CA INDEX NAME)



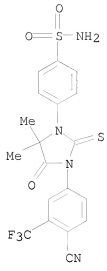
RN 879613-93-1 CAPLUS
CN Carbamic acid, [2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]-, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)



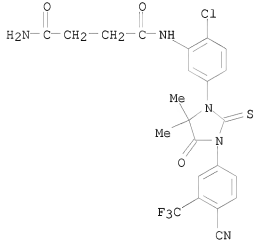
RN 879613-96-4 CAPLUS
CN Guanidine, N-[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]- (CA INDEX NAME)



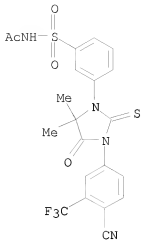
RN 879613-97-5 CAPLUS
CN Benzenesulfonamide, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]- (CA INDEX NAME)



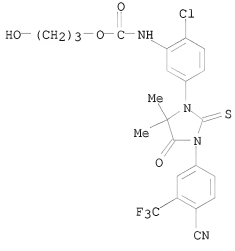
RN 879614-17-2 CAPLUS
CN Butanediamide, N1-[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]- (CA INDEX NAME)



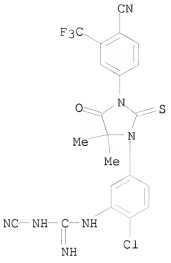
RN 879614-35-4 CAPLUS
CN Acetamide, N-[[3-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]sulfonyl]- (CA INDEX NAME)



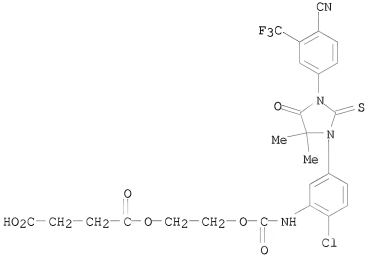
RN 879614-42-3 CAPLUS
CN Carbamic acid, [2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]-, 3-hydroxypropyl ester (9CI) (CA INDEX NAME)



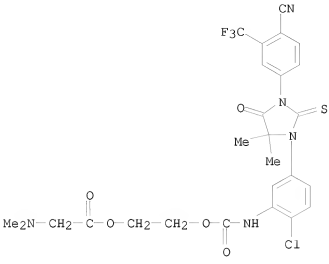
RN 879614-43-4 CAPLUS
CN Guanidine, N-[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]-N'-cyano- (CA INDEX NAME)



RN 879614-58-1 CAPLUS
CN Butanedioic acid, 1-[2-[[[[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]amino]carbonyl]oxy]ethyl] ester (CA INDEX NAME)

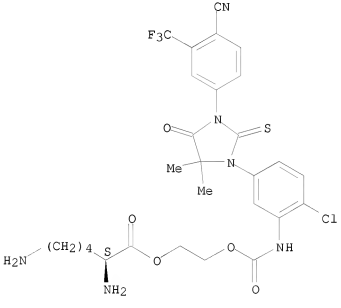


RN 879614-60-5 CAPLUS
CN Glycine, N,N-dimethyl-, 2-[[[[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]amino]carbonyl]oxy]ethyl ester (CA INDEX NAME)

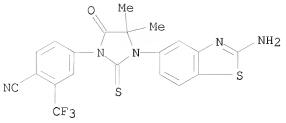


RN 879614-63-8 CAPLUS
CN L-Lysine, 2-[[[[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]amino]carbonyl]oxy]ethyl ester (CA INDEX NAME)

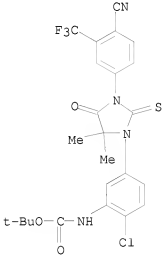
Absolute stereochemistry.



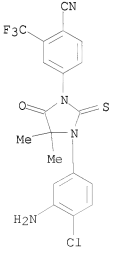
IT 879614-75-2P 879614-99-0P 879615-02-8P
879615-20-0P 879615-26-6P 879615-33-5P
879615-54-0P 879615-83-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of imidazolidine derivs. as antiandrogens)
RN 879614-75-2 CAPLUS
CN Benzonitrile, 4-[3-(2-amino-5-benzothiazolyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



RN 879614-99-0 CAPLUS
CN Carbamic acid, [2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



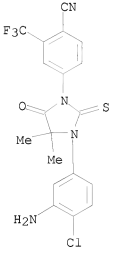
RN 879615-02-8 CAPLUS
CN Benzonitrile, 4-[3-(3-amino-4-chlorophenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)- (CA INDEX NAME)



RN 879615-20-0 CAPLUS
CN Benzonitrile, 4-[3-(3-amino-4-chlorophenyl)-4,4-dimethyl-5-oxo-2-thioxo-1-imidazolidinyl]-2-(trifluoromethyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

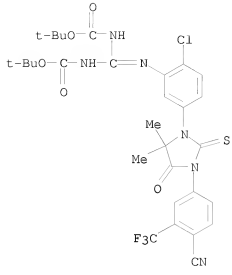
CRN 879615-02-8
CMF C19 H14 Cl F3 N4 O S



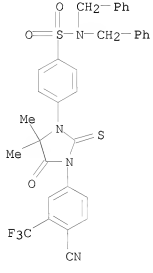
CM 2

CRN 76-05-1
CMF C2 H F3 O2

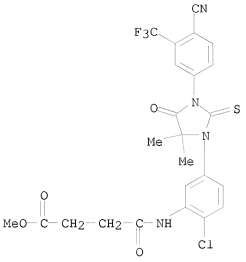
RN 879615-26-6 CAPLUS
CN Carbamic acid, [[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]carbonimidoyl]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 879615-33-5 CAPLUS
CN Benzenesulfonamide, 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-N,N-bis(phenylmethyl)- (CA INDEX NAME)



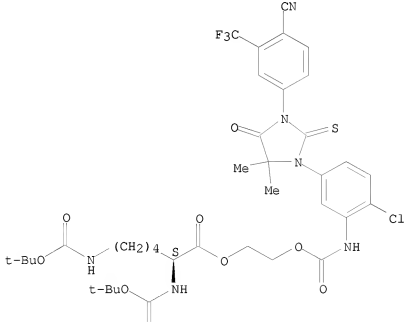
RN 879615-54-0 CAPLUS
CN Butanoic acid, 4-[[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]amino]-4-oxo-, methyl ester (CA INDEX NAME)



RN 879615-83-5 CAPLUS
CN L-Lysine, N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-, 2-[[[[2-chloro-5-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]phenyl]amino]carbonyl]oxy]ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

| | | |
|---|---|---|
| OS.CITING REF COUNT: | 3 | THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS) |
| REFERENCE COUNT: | 24 | THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS |